

REMARKS

Reexamination and reconsideration of claims 1-20 are respectfully requested. A petition for a one-month extension of time under 37 C.F.R. 1.136(a) is also included herewith.

Additionally, Applicants respectfully request entry of this reply into the record because it places the application in better condition for appeal.

Claims 1-12 were rejected under 35 U.S.C. sec. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 has been amended to remove any indefiniteness that may have existed. Moreover, the amendment of claim 1 is not an admission that the art of record teaches, discloses, or suggests the features of the claim. Applicants direct the Examiner's attention to p. 10, 11. 10-16 of the present application which is reproduced below.

As a consequence of the high energy input, the outer sheath material melts in the region of the laser focus. Since the carbon contained in the soot combusts at the same time to form CO₂, a largely soot-free, foamlike structured region is created, which very markedly scatters incident light. The region of the outer sheath layer 11 scanned with the laser probe thus looks like a white surface on a black background.

Additionally, one of ordinary skill reading the claims and the specification would have understood that this is the mechanism at work in the claimed invention. Therefore, the amendment of claim 1 does not raise new issues. Withdrawal of the sec. 112 rejection, second paragraph, of claims 1-12 is respectfully requested.

Claims 13-20 were rejected under 35 U.S.C. sec. 112, first paragraph, as containing subject matter which was not described in the specification to enable one skilled in the art to make and/or use the invention. The rejection reads claim 13 as

reciting a sheath having "an exterior layer (only)." Moreover, the rejection further states "[t]he present specification appears to only support a first and second layer, both containing a proportion of a dye, and not a single exterior layer as set forth in claim 13." See the Office Action dated May 14, 2003 at pp. 3-4. Applicants assert that the Office Action misinterpreted claim 13.

First, Applicants respectfully submit that "only" is not recited anywhere in claim 13. In other words, the Office Action is inserting language into the claim in order to make the rejection. Second, claim 13 uses the transitional phrase "comprising" in the preamble. Additionally, the present application supports embodiments not having a proportion of dye in both layers. For instance, the present application supports using "the sheathing as a hose or tube (water hose, pipe for floor heating, and so forth), in which the inner layer of the suitably dimensioned, adequately thick sheathing need not necessarily contain soot or graphite". See the present application at p. 11, ll. 11-14. For at least these reasons, withdrawal of the sec. 112 rejection, first paragraph, of claims 13-20 is warranted and respectfully requested.

The drawings were objected to under 37 C.F.R. 1.83(a) for not showing every feature of the invention specified in the claim. Applicants assert that Fig. 2 depicts every feature of the invention. Moreover, the objection under 37 C.F.R. 1.83(a) is improper for the reasons stated above with respect to the sec. 112, first paragraph, rejection. For at least these reasons, withdrawal of the objection under 37 C.F.R. 1.83(a) is warranted.

Claims 1, 2, 3, 10, 11, and 12 were rejected under 35 U.S.C. sec. 103(a) applying U.S. Pat. No. 4,865,198 ('198) without a teaching reference. For a patent to be applicable under sec. 103(a), the teaching must, *inter alia*, expressly or inherently, teach, disclose, or otherwise suggest each and every feature of

the claimed invention. Additionally, motivation and suggestion to modify the patent must be present. The sec. 103(a) rejection of claims 1, 2, 3, 10, 11, and 12 is traversed for at least the reasons as stated herein.

Claim 1 recites a sheathing article including a first layer of a first material containing a first proportion of a dye, and bounding an interior, a second layer adjacent the first layer and bounding an exterior, the second layer having a marking face adapted to be marked by irradiation with photons, and the second layer being formed of a second material and containing, at least inside the marking face, a second proportion of the dye smaller than the first proportion of dye, the second proportion of dye associated with the second layer being dimensioned to cause a color change upon irradiation with photons by melting an irradiated region, thereby forming a foamlike CO₂ region that scatters incident light.

The Office Action admits, and Applicants agree, that the '198 patent fails to teach a dye provided in both the first and second layers. See p. 5 of the Office Action dated May 14, 2003. Moreover, the '198 patent fails to teach, disclose, or otherwise suggest proportions of dye in the respective layers. Still further, the '198 patent fails to teach using photons to melt an irradiated region, thereby forming a foamlike CO₂ region that scatters incident light.

This Office Action states that it would have been "obvious design choice" to use the proportions of dye as recited in the respective layers of claim 1. See the Office Action dated May 14, 2003 at pp. 5-6. Recapping the prosecution, in the previous reply Applicants pointed out that the rejection of sec. 103(a) of claims 1, 2, 3, 10, 11, and 12 failed to address the recitation of the proportions of dye in the first and second layers. In this Office Action, the features are said to have been an "obvious design choice", despite the fact that the Office Action admits

that the '198 patent does not teach a dye in both the first and second layers.

Besides not being supported by concrete evidence on the record, merely stating that features of the claimed invention are a matter of design choice, without more, is an improper rejection and does not make out a *prima facie* case of obviousness. Moreover, stating that features of a claimed invention are a matter of design choice, without more, does not afford the Applicant a fair opportunity to address the rejection. Thus, the Office Action failed to make a *prima facie* case of obviousness. For this reason alone, the sec. 103(a) rejection of claims 1, 2, 3, 10, 11, and 12 should be withdrawn.

As an independent basis, Applicants assert that the skilled artisan would not have taken a suggestion or been motivated to make the purported modification as suggested in the Office Action. The Office Action states that "[i]t would have been obvious to one having ordinary skill in the art to have also included a dye in the first layer (3) to have created a contrast in layer (4) after removal of the overwrapping. Thus any unauthorized movement of the overwrapped layer is clearly visible as an ink pattern which is deposited on the overwrap layer will not be in register with the de-inked surface of the package substrate, while that which is left behind will show the color contrast between the first and second layers, the background of the color from layer 3 showing through the de-inked area." See pp. 5-6 of the Office Action dated May 14, 2003.

Applicants have tried, but are unable to understand the rejection as set forth. As best understood, the rejection is stating that the first layer (3) would have a dye thereon in addition to ink coating 4. The skilled artisan would not be motivated to modify the '198 in this manner because ink coating 4 is sufficient for the practice of the '198 patent. Moreover, this modification still does not teach all of the features

recited in claim 1.

Applicants assert that the Office Action misinterpreted the teaching of the '198 patent. Fig. 2 schematically depicts the operation of the '198 patent. As stated by the '198 patent, "Fig. 2 displays a patterned laser beam passing through an overwrap layer 2 and striking an ink coating 4 on a substrate 3, thereby evaporating ink from the substrate 3 and depositing the evaporated ink in a registered ink pattern 41 on the ink facing side of the overwrap layer 2." See the '198 patent at Col. 3, ll. 3-13. In other words, the skilled artisan would have understood that the '198 patent relates to tamper-evident over-wrapped products that clearly provide the consumer with evidence of any attempt at prior entry through an over-wrap film closure. See the '198 patent at Col. 1, ll. 18-22. Moreover, tampering is indicated by movement of the over-wrap with respect to the printed package/substrate or vice versa after ink transfer to the overwrap layer 2. See the '198 patent at Col. 1, ll. 25-40.

The Office Action failed to make a *prima facie* case of obviousness. For at least the reasons stated, withdrawal of the sec. 103(a) rejection of claims 1, 2, 3, 10, 11, and 12 is warranted and is respectfully requested.

Claims 4-9 and 13-20 were rejected under 35 U.S.C. sec. 103(a) applying the '198 patent in view of U.S. Pat. No. 6,031,457 ('457). For at least the reasons stated above with respect to claim 1, withdrawal of the sec. 103(a) rejection of claims 4-9 is warranted and is respectfully requested.

Regarding claims 13-20, the purported modification does not teach all the features of claim 13. Moreover, if the purported modification taught all of the features of claim 13 it would be rendered inoperable for its intended purpose.

The amendment of claim 13 is not an admission that the art of record teaches, discloses, or suggests the features of the claim. Claim 13 recites a sheathing article including a

sheathing separating an interior from an exterior, and having an exterior layer, the exterior layer being transparent to a radiation used for marking said exterior layer, and containing a proportion of a dye selected from the group consisting of soot and graphite, and a dimension of the exterior layer selected from the group consisting of a thickness of the exterior layer and the proportion of the dye being selected such that the exterior layer absorbs the radiation used for marking completely, and a color change results within an irradiated region upon irradiation.

On the other hand, the '198 patent requires the energy source to vaporize the ink on substrate 3. Thus, if the overwrap layer 2 absorbed the radiation used for marking completely, the ink would not be vaporized and hence the ink would not be transferred to the inner surface of overwrap layer 2. Clearly, the '198 patent would be inoperable for its intended purpose if the radiation used for marking was absorbed completely by overwrap layer 2.

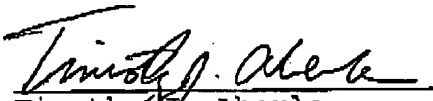
Furthermore, claim 13 recites, *inter alia*, melting the irradiated region, thereby forming a foamlike CO₂ region that scatters incident light. The '198 patent does not teach, disclose, or otherwise suggest this mechanism for marking the overwrap layer 2. Thus, the withdrawal of the sec. 103(a) rejection of claims 13-20 is warranted and is respectfully requested.

One-hundred and ten dollars are believed due in connection with this Reply for a one-month extension of time. If any other fees are due in connection with this Reply, please charge any fees, or credit any overpayment, to Deposit Account Number 50-0425.

Allowance of all pending claims is believed to be warranted and is respectfully requested.

The Examiner is welcomed to telephone the undersigned to discuss the merits of this patent application.

Respectfully submitted,


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